

ABSTRACT OF THE DISCLOSURE

In a physical layer of each data transmission apparatus 1, a physical layer initialization process is performed in response to a reset exit process performed by their respective CPUs 4. Then, 5 in a link layer of a master data transmission apparatus 1 and in a link layer of a data transmission apparatus 1 which operates in a normal mode, after the completion of the physical layer initialization process, a link layer initialization process is performed in response to a reset exit process performed by their 10 respective CPUs 4, and then the data transmission apparatuses 1 start data communication using their respective physical layers and link layers. On the other hand, a link layer of a data transmission apparatus 1 which operates in a bypass mode maintains its reset state, and the data transmission apparatus 1 transmits 15 data using only its own physical layer by bypassing its own link layer.